

CLASSIFICATION CONFIDENTIAL
 SECURITY INFORMATION
 CENTRAL INTELLIGENCE AGENCY
 INFORMATION FROM
 FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

50X1-HUM

CD NO.

COUNTRY USSR

DATE OF
INFORMATION 1946 - 1952

SUBJECT Economic - Oil-well drilling

DATE DIST. 7 Nov 1952

HOW
PUBLISHED Daily newspapers

NO. OF PAGES 3

WHERE
PUBLISHED USSRDATE
PUBLISHED 7 Jun - 4 Sep 1952SUPPLEMENT TO
REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE
 OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793
 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVE-
 LATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS
 PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers as indicated.

SOVIET PROGRESS IN OIL-WELL DRILLINGMultihorizon Oil Wells

At the end of 1951, oil well No 1333/1334/1336, a three-horizon well, was drilled by a brigade of the Kirov Office of Drilling. This was the first well of this type in the USSR. It was 520 meters deep and was drilled by the rotor method with the use of mobile electric drilling units and a normal mud solution with 120 revolutions of the rotor per minute, a pressure of 7 tons on the bit, and a pump output of 18-20 liters per second. Three drillers completed the well 8 days after the start of drilling. The commercial speed in drilling this well was 867 meters per machine-month, and the average mechanical speed of drilling was 5 meters per hour.

Later, the same brigade drilled two more two-horizon wells to a depth of 400 and 429 meters at a speed of 1,333 and 1,387 meters per machine-month, and an average mechanical speed in drilling of up to 6.5 meters per hour.

The new method of drilling multihorizon oil wells spread primarily among oil fields of the Kirovneft' Trust and later to fields of the Molotovneft', Leninneft', Ordzhonikidzeneft', Azizbekovneft', and Neftechalanef't trusts. In the Molotovneft' Trust well No 885/1127, a two-horizon well was drilled by the forced method. The well went to a depth of 1,100 meters and the speed per machine-month was 1,091 meters, as against a planned 846 meters. The brigade fulfilled its quota for all types of work on an average of 126 percent and the well was put into operation 5.7 days ahead of schedule. During 6 months of 1952, tens of multihorizon wells have been drilled in oil fields of the Azneft' Association. (1)

Turbodrilling Speeds Up Performance of Drilling Brigades

At the Kirov Office of Drilling several brigades are employing the turbo-drilling method for oil-well drilling. According to the plan, Kirov drillers are to drill 40,000 meters by this method in 1952. During 7 months of 1952,

- 1 -

CLASSIFICATION

CONFIDENTIAL

STATE	<input checked="" type="checkbox"/>	NAVY	<input checked="" type="checkbox"/>	NSRB		DISTRIBUTION														
ARMY	<input checked="" type="checkbox"/>	AIR	<input checked="" type="checkbox"/>	FBI																

MBPCX

CONFIDENTIAL

50X1-HUM

17 wells drilled by the turbodrilling method have already been turned over to the oil field workers. The drilling speed exceeds the plan considerably. In the drilling of well No 1580, in oil field No 2, the drilling brigade achieved a speed of 2,616 meters per machine-month. In July 1952 the average speed in drilling for the office as a whole was 1,400 meters instead of the planned 1,089 meters.(2)

Turbodrilling is spreading widely in the Bashkir ASSR. Here two expert drillers in collaboration with engineers and technicians worked out the technology of high-speed drilling by the forced method. This has made it possible, despite the difficulties encountered in drilling through the rock in the area, to achieve the commercial speed in drilling of 1,000 meters per machine-month. During the past 2 years, the increase in the speed in drilling oil wells has averaged 37 percent in exploitational drilling.

In May 1952, the brigade of one expert driller achieved the commercial speed in drilling of 1,224 meters per machine-month, and in less than 3 months this record was surpassed by another brigade which drilled 1,408 meters per machine-month. The latter brigade put well No 692 into operation in 36 days, an unheard-of speed for the Bashkir ASSR.

However, the limits of high-speed drilling by the forced method have not been reached and it is the duty of Soviet petroleum workers to push their performance higher. First, the entire stock of drilling machines must be converted to the forced method. In this connection, a serious task faces designers of the cutting tool. The petroleum workers need a bit which will be able to stand an axial load of 24-26 tons and will be able to cut in one run 40-50 meters instead of the present 15-16 meters. However, the problem of a suitable cutting tool for the eastern regions has not up to now received the attention of the construction offices of the Ministry of the Petroleum Industry.(3)

Drilling Achievements of Specific Enterprises

A brigade of the Azizbekovskiy Office of Drilling introduced the forced method of drilling and, as a result, the drilling of well No 1145 was completed 7.4 days ahead of schedule. The well was drilled to a depth of 1,145 meters at a speed of 2,290 meters per machine-month, as against a planned 2,148 meters per machine-month. As a result of the efficient working of the bits, the mechanical speed of drilling, for the well as a whole, was 11.8 meters per hour, as against a planned 8.3 meters. Production norms were fulfilled by the brigade for all types of work on an average of 135.2 percent, including mechanical drilling 160.3 percent.

Workers of the Azizbekovskiy Office of Drilling completed the half-year plan for drilling on 4 June. They exceeded the planned speed for drilling 130.1 meters which enabled them to drill four additional deep wells. Reduction in drilling costs led to a savings of 300,000 rubles.

On 4 June, a brigade of the Leninskiy Office of Drilling completed the drilling of well No 2274 to a planned depth of 1,150 meters at a speed of 1,950 meters per machine-month, as against a planned 1,437 meters.(4)

Director P. Mamed of the Buzovny Office of Drilling reported that a member of his office achieved an all-union record in 1946 by drilling 2,600 meters per machine-month. Since then, he continued, new records have been established and one expert driller of the office has drilled at the speed of 5,211 meters per machine-month.(5)

- 2 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

Performance of Drilling Office No 1, one of the largest enterprises of the "Zmorneft" Association, is inadequate. During 6 months of 1952 it fulfilled only 42 percent of the drilling plan and only 59 percent of the plan for drilling speed. During this period, the office turned over to petroleum workers only 22 oil wells instead of the planned 66.(6)

SOURCES

1. Baku, Bakinskiy Rabochiy, 15 Jul 52
2. Ibid., 22 Aug 52
3. Moscow, Izvestiya, 4 Sep 52
4. Bakinskiy Rabochiy, 7 Jun 52
5. Tbilisi, Zarya Vostoka, 3 Sep 52
6. Bakinskiy Rabochiy, 17 Aug 52

- E N D -

- 3 -

CONFIDENTIAL